Seven Steps to Lowering Print Costs within 90 Days

Changes to Devices Settings

1. Default use of 'duplex' (double-sided) printing

Average savings of \$.0040 per page, resulting in government-wide savings up to \$61M annually, plus up to 546,850 trees saved

By printing in duplex mode, the government can save on paper costs and reduce the number of trees "consumed" by agencies. IT personnel can encourage the use of duplex printing by making this option the default for each duplex-capable piece of print equipment (printers, copiers, or multi-function devices). To set this option, use the device menu to navigate to the default factory settings (also accessible through the network interface for networked devices) and change the document style setting to duplex. IT personnel should also ensure that default print settings on user machines are set to duplex.

2. Default use of 'black and white' printing

Average savings of \$.0113 per page, resulting in government-wide savings up to \$171M annually

Printing in color can be up to 10 times the cost of printing in black and white. IT personnel can use the default output options of print devices to encourage users to print more documents in black and white. To set this option, navigate to the default factory settings of the device and select the 'black and white' print output option. In addition, IT personnel must ensure that print requests are mapped to the correct printer to ensure that black and white requests are not printed on color devices. IT personnel should also ensure that default print settings on user machines are set to black and white.

3. Default use of 'draft' quality (rather than 'high' quality) printing Average savings of \$.0020 per page, resulting in government-wide savings up to \$30M annually

The use of draft quality printing can reduce toner costs by up to 20%, typically without significant decreases in the quality of output pages. IT personnel can use the menu of each piece of print equipment to navigate to the default factory settings of the device and change the print mode to 'draft.' IT personnel should also ensure that default print quality settings on user machines are set to 'draft'.

4. Improved use of sleep mode

Average savings of \$186 per year per multi-function device, \$31 per year per networked printer and \$1 per year per personal printer, resulting in government-wide savings up to \$26M annually, plus a reduction in carbon dioxide emissions equivalent to taking 46,807 cars off the road for one year

Most government print devices are generally on all day, but are used only a portion of the time. IT personnel can lower costs and reduce energy consumption by changing device settings such that the device moves to "sleep mode" at the end of the working day and on weekends. Settings for networked devices can be changed remotely but settings for non-

networked devices will need to be updated at the device. Users should also consider powering off devices at night and over the weekends to further reduce energy consumption.

Changes to End User Applications

5. Default use of toner-efficient fonts

Average savings of \$.0020 cents per page, resulting in government-wide savings up to \$30M annually

The use of toner-efficient fonts can reduce toner costs by up to 30% over Arial. IT personnel can modify the default font used in word processing or presentation software to more toner-efficient fonts such as Century Gothic, Garamond, or Times New Roman. Agency policies should also be considered to drive the use of toner-efficient fonts.

Changes to the Print Fleet

6. Removal of personal printers

Average toner and energy savings of \$29 per personal printer removed, resulting in government-wide savings up to \$6M annually plus a reduction in carbon dioxide emissions equivalent to taking 475 cars off the road for one year

Although personal printers have a low sticker-price, their high toner costs and energy consumption rates have led leading commercial firms to eliminate them from the workplace. However, these devices are still all too common in Federal agencies. By staging a campaign for employees to "turn in" their devices, agencies will reduce toner costs and energy consumption. For the desktop printers that remain, IT personnel should ensure that print requests are mapped to non-personal printers to reduce the amount of printing from these devices.

7. Freeze purchases of personal printers

Average cost avoidance of \$141 per personal printer, resulting in government-wide cost avoidance up to \$10M annually

In concert with removing existing personal printers, agencies can develop policies to freeze the purchase of new personal printers to make sure these devices are not purchased in the future.